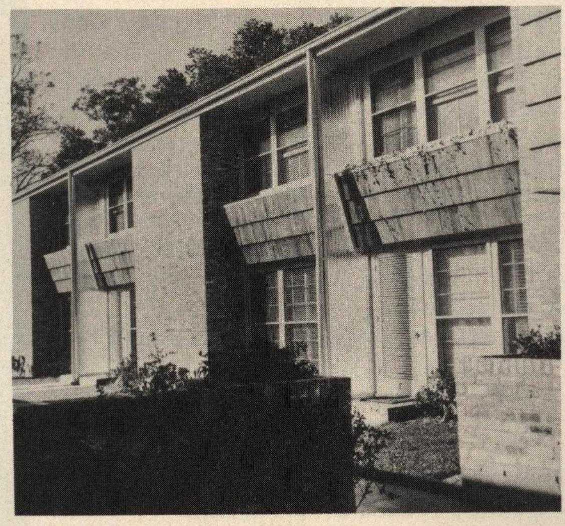
STAINED SHINGLES AND SHAKES
for Roofs and Sidewalls

Traditionally American design is enhanced with stained cedar shingle roof, combined with stained shingle or shake sidewalls.



Numberless effective combinations utilize stained shingles or shakes for partial coverage on sidewalls.

Stained Shingle & Shake ASSOCIATION

STAINED CEDAR SHAKES AND STAINED CEDAR SHINGLES

MASTER SPECIFICATIONS for ARCHITECTS and BUILDERS

●

SHEATHING BOARDS

(The choice of open or solid sheathing is optional when Stained Shingles or Shakes are applied. The geographical location of the building will determine the most practical procedure.)

(1) All sheathing shall be

(Use 2 for open sheathing and 3 for solid sheathing.)

(2) square edge boards 1″x3″, 1″x4″ or 1″x6″, and shall be spaced the same distance apart on centers as the shingles are to be laid to the weather, or 1″x6″ shall be spaced on double the weather exposure.

(Use 3 for solid sheathing.)

(3) Dressed and Matched or Shiplap cut from 1″ stock shall be laid solid.

(Use 4 for BOTH open and solid sheathing.)

(4) Each board shall be double-faced nailed at each end and at each bearing with two 8d nails driven about 1″ from the edges of the boards.

SHEATHING PAPER

(5) The outside of all exterior sheathed walls shall be covered with one continuous unbroken layer of rosin sized sheathing paper weighing not less than 20 lbs. per roll of 500 square feet.

(If added insulation is wanted, dry or unsaturated deadening felt, or light-weight "blue" wall board may be specified.)

(6) Sheathing paper shall be laid shingle fashion without wrinkles or buckles and with all joints at least 6″ and shall be carried over the studs, jambs, heads and sills of all openings, and no end laps shall occur within 18″ of any internal or external corner.

SHINGLES AND SHAKES

(7) The contractor shall cover all roof surfaces with *(Specify Stained Cedar Shingles or Handsplit Cedar Shakes.)*

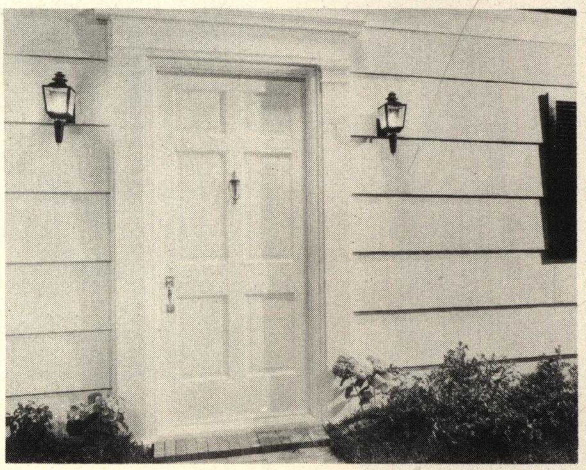
(8) and all exterior side walls, sides of dormers, gable ends

(9) with Stained Cedar Shakes or Stained Cedar Shingles.

AMERICA'S TOP QUALITY ROOF AND SIDEWALL MATERIAL

Stained processed Shakes and Stained Cedar Shingles offer the architect versatility in color, weather exposure, and adaptability to all climatic conditions. Excellent quality, traditional with cedar shingles for roofs and sidewalls, is enhanced by full stain impregnation.

Beauty is enhanced by machine vertical graining and machine squared edges and butts, permitting tight, invisible joints on double-coursed walls.



This entrance illustrates the advantage of the variable exposures obtainable with double-coursed Stained Shake sidewalls. Choice of 12″ to 14″ exposure permits design of course lines flush with top and bottom of doorways and window casings. Tight "invisible" joints result from parallel edges and square butts of processed shakes.

ROOF AND SIDEWALL *Specifications*

ADVANTAGES OF STAINED SHINGLES AND SHAKES

Dip-Stained Shingles and Shakes have two decided advantages of importance to architects. The dipping process completely immerses all sides and edges of the cedar in the penetrating stain oils, thus adding protection to the concealed surfaces, as well as those exposed to the weather, assuring complete color impregnation and tight fitting. Bulk dip-staining is an economy factor because of lower labor costs compared with staining after application. Members of the Stained Shingle and Shake Association have developed stains of particular excellence for impregnating cedar. Shingles and Shakes stained by the manufacturer are certain to be more skillfully colored.

ADVANTAGES OF GROOVED "PROCESSED" SHAKES

A grooved or "processed" shake is a vastly improved top-grade cedar shingle. Precision machines are used to give the flat exposed surface a "combed" texture more uniform and more beautiful than the early American Handsplit Shakes. In addition, the machine process squares up the normally irregular shingle butts so that true horizontal course-lines are assured. Vertical edges of the shakes are machined parallel, permitting the use of tight, "invisible" joints which eliminate "shingled" appearance, and provide a luxury siding look at great savings in cost. Stained Processed Shakes are readily available in a wide variety of colors through the manufacturers listed at the end of this bulletin.

(Stained Cedar Shakes and Stained Shingles are manufactured in three different lengths: 16", 18" and 24". The choice of length to be used may be determined upon the basis of the architectural effect that is wanted, and the cost that is justified. The longer shingles have thicker butts and are consequently longer lived, although the 16-in. length will give exceedingly good service, and very long life when properly applied according to these specifications.

(10) Stained Shingles (or Handsplit Shakes) for roofs shall be (*Specify length.*)

(11) Stained Shakes (or Stained Shingles) for side walls shall be (*Specify length.*)

(12) Stained Shakes (or Stained Shingles) for outer courses shall be (*Specify length.*)

(13) Shingles for under courses shall be (*Specify grade and length.*)

(14) Roof shingles shall be laid with a weather exposure of (*Specify exposure to the weather in inches from the following table.*)

(*In general the lowest pitch used in the roof will govern, although certain instances may permit two different weather exposures for separate parts of the same roof.*)

Pitch of Roof			*Exposure of Shingles in Inches*		
Pitch	*Rise in inches*	*Run*	*16*	*18*	*24*
⅛	3	12	3¾	4¼	5¾
⅙	4	12			
¼	6	12	5	5½	7½
⅓	8	12			
½	12	12			
⅝	15	12			
¾	18	12			

(15) Side wall Stained Shakes (or Stained Shingles) shall be applied with a weather exposure of (*Specify exposure to the weather in inches from the following table.*)

Length of Shingles (in inches)	*Exposure of Shingles (in inches)*	
	Single Course	*Double Course**
16	6 to 7½	8 to 12
18	6 to 8½	9 to 14
24	8 to 11	12 to 16

**Assuming exposed course is face or butt-nailed.*

(16) Shingles or Shakes shall be doubled at all eaves (*Specify "tripled" where box cornices or narrow eaves occur.*)

(*Use 17 for side walls.*)

(17) and at foundation line.

(*To insure proper spill into gutters use 18.*)

(18) Butts of the shingles in the first course on roofs shall project 1½" from the first sheathing board.

STAINED CEDAR SHAKES AND STAINED CEDAR SHINGLES

(19) Roof shingles shall be spaced apart not less than ¼″ nor more than ⅜″.

(20) Side wall Stained Shakes (or Stained Shingles) shall be (*Specify spacing as in 21 for Shakes or 22 and 23 for Stained Shingles.*)

(21) laid with close jointed edges,

(22) spaced apart not less than ⅛″ nor more than ¼″,

(23) and the joints in the shingles in any one course shall be not less than 1½″ away from the joints in adjacent courses.

TAPERSPLIT SHAKES

(24) Roof sheathing shall be spaced on centers equal to the weather exposure of the Shakes.

(25) Exposure shall be 10″ or less on roofs rising 5½″ or more in 12″. (*SEE 32 for Resawn Shakes.*)

(26) First course at eaves shall be tripled-covered with: one full strip of 30 lb. felt or equal plus one course of 18″ tapersplits plus one course of 25″ tapersplits.

(27) One 12″ strip of 30 lb. felt shall be laid (*Use 28 for 10″ exposure or 29 for 8″ exposure.*)

(28) 20″ up from the butt line of each course.

(29) 16″ up from the butt line of each course.

(30) Hips and ridges shall be covered with two strips of 30 lb. felt, 8″ wide before laying hip or ridge Shakes.

(31) Nails shall equal quality specifications for Shingle roofs and shall be 5d or 6d for roof shakes with butt thickness of ½″. For shakes of ⅝″ to 5/4″ thickness, 7d or 8d nails shall be used.

RESAWN SHAKES

(32) Specifications shall be same as Tapersplit Shakes except that Resawn Shakes are not recommended for roofs having less than 4″ rise in 12″ run.

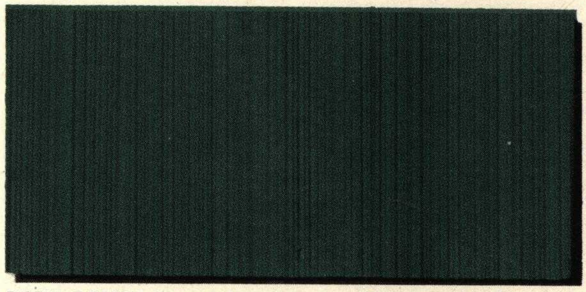
HIPS AND RIDGES

(33) All hips and ridges shall be (*Specify type of which 34 is an example.*)

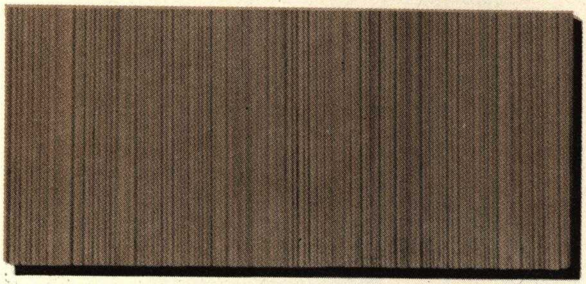
(34) the modified "Boston" type. Shingles shall be of approximately the same uniform width. The first Shingle of the hip shall be sawed across the butt so that the end of the butt will be parallel with the butts of the Shingles in the first course of Shingles at the eave line. It shall then be nailed in place with the lower edge extending along a line previously marked off back from the center line of the hip on that side, the nails being placed so that they will be covered by the next hip Shingle applied.

COLOR ON WALLS

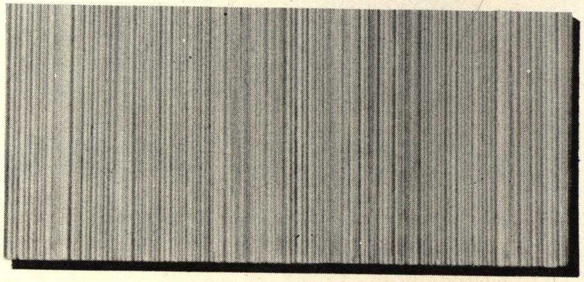
Dip-stained at the manufacturing plants, processed cedar Shakes are offered in a wide variety of excellent full-toned colors. Shown below are four of the most preferred shades.



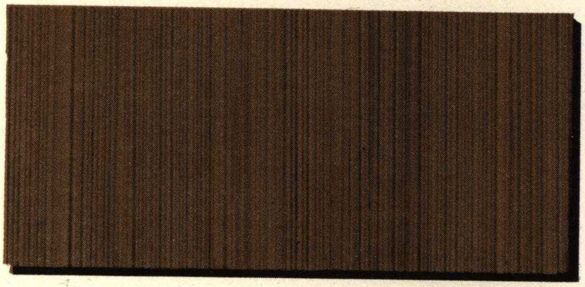
DARK GREEN—Perennial favorite for all climates, a dark green Shake is manufactured by nearly all members of the Association.



LIGHT BROWN—A beautiful shade for full walls, especially adaptable to architectural treatments in combination with stone and tile.



LIGHT GRAY—This neutral tone, produced by all manufacturers, resists wear—lasts for years without restaining.

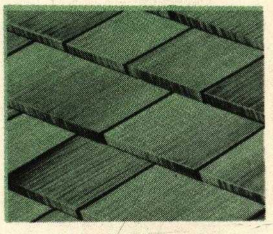


DARK BROWN—Becomes more beautiful and mellow with age. Many home-owners and architects agree that this Shake never needs restaining.

ROOF AND SIDEWALL Specifications

COLOR ON ROOFS

Stain impregnation is particularly beneficial in making roofs more resistant to snow, rain and sun. Pre-staining is inexpensive, adds longer life and real beauty.



Standard Green is a favorite for Cape Cod and American Colonial roofs.

Dark Green has extreme resistance to sun and rain; complements green landscaping.

Deep Red—America's foremost roof color for small homes.

Brown—Especially complimentary to light or dark brown shake sidewalls.

The edge of this Shingle projecting above the center line of the hip shall be cut back flush with the face of the opposite hip or ridge Shingle. The next two Shingles are now applied, but in reverse order, so that the final trimmed-off edge slants in a direction opposite to that of the first exposed edge.

NAILS AND NAILING

(Do not use bright, or blued, steel wire nails in applying Shakes or Shingles.)

(35) Each roof Shingle shall be rigidly secured in place with not more than two full driven rust-resistant or zinc coated. (*Specify size.*)

(Use 36 with 40 for new roofs with 16″ and 18″ shingles and for new single-coursed side walls.)

(36) 3d shingle nails.

(Use 37 for new roofs with 24″ shingles.)

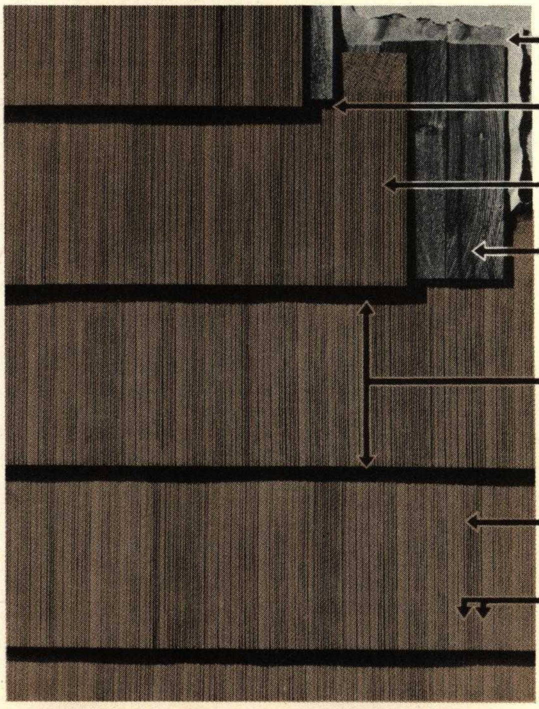
(37) 4d shingle nails.

(Use 38 for new double-coursed side walls with all shingles and for over-roofing with 16″ and 18″ shingles.)

(38) 5d "box" or special 14-gauge shingle nails.

(Use 39 for over-roofing with 24″ shingles. For butt-nailing in double-coursing use small head 5d nails.)

DOUBLE COURSING SIDEWALL APPLICATION



Unsaturated building paper is laid between undercoursing Shingles and sidewall sheathing.

Outer course is laid ½″ lower than the under (concealed) layer, providing attractive thick appearance and shadow line.

STAINED CEDAR SHAKES or STAINED CEDAR SHINGLES are used for the outer course.

Unstained undercoursing Grade Shingles are used for the under course.

Weather exposures may be varied to achieve many desirable architectural effects. Sixteen-inch shingles or shakes may be exposed up to 12″ to the weather. Eighteen-inch shingles and shakes allow exposures as great as 14″ to the weather.

Stained cedar shakes or shingles may be laid with either tight or spaced joints, depending on the effect desired.

Two rust-resistant, small head 5d nails per shingle or shake for outer course, applied 2″ above butt-line and ¾″ from edges. Use a third nail in shingles wider than eight inches. Each undercourse shingle may be stapled temporarily, or held in place with one 3d nail.

STAINED CEDAR SHAKES AND STAINED CEDAR SHINGLES

(39) 6d "box" or special 14-gauge shingle nails.

(40) except that 5d shingle nails shall be used for hips and ridges. (See 38.)

(41) Nails shall be driven flush but not so that the head crushes the wood and shall be placed not more than ¾" from the side edges of the shingles and ¾" to 2" above the butt line of the shingles in the next course above.

(*Use 42 where double-coursing occurs.*)

(42) except that in butt-nailing in double-coursing, the nails shall be placed from 2" to 3" above the butt line, and there shall be a third nail used in shakes over 8" wide.

FLASHINGS

(43) All flashings and sheet metal throughout shall be (*Specify material, weights, etc.*)

(*The proper choice of materials for valleys and flashings rests with the architect, and must, of course, be determined upon the basis of cost as well as probable life. 16" Stained Cedar Shingles or Stained Shakes will give good service for 25 to 50 years or longer, depending upon exposure and pitch of roof; hence much consideration should be given to the proper choice of metal for flashings.*)

LEAD: *Lead should be specified as "hard lead" weighing not less than 2½ lbs. per sq. ft. for step flashings and not less than 3 lbs. per sq. ft. elsewhere.*

TIN: *Tin or terne plates should be not less than IX (and if terne, coated with tin and lead, containing not less than 25% tin) and weighing not less than 300 lbs. per box of 112 sheets 20" x 28" in size.*

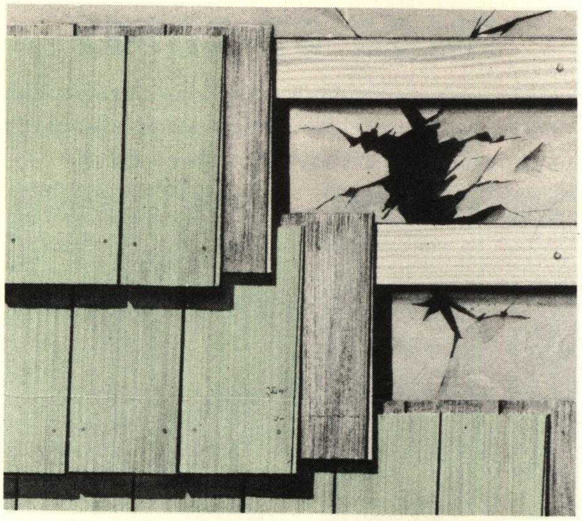
GALVANIZED IRON: *Galvanized Iron should be specified by gauge and coating using 24 or 26 gauge with a coating not less than 1½ ounces per square foot.*

COPPER: *Copper should be specified as soft sheet copper weighing not less than 16 ounces per square foot.*

SOLDER: *Solder should be specified as half and half pig lead and block tin. Flux should be rosin for tin and acid for galvanized iron.*

(44) Proper allowance shall be made in all cases for expansion and contraction and all flat and lap seams shall be made in the direction of the flow of water.

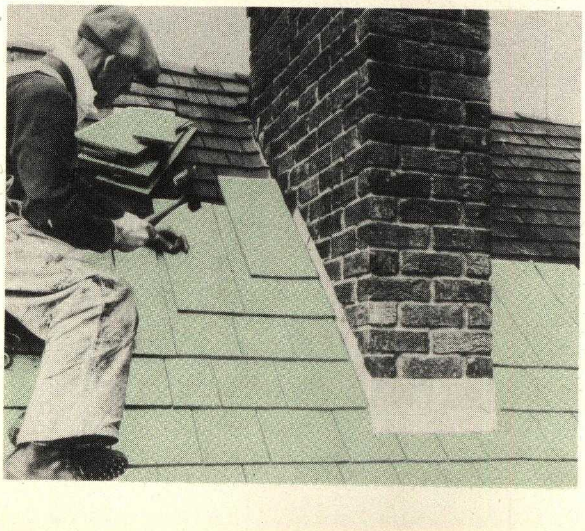
(45) The Contractor shall provide flashings and counterflashings wherever indicated on the drawings and as necessary to make a weather and water tight job. Flashings shall be free from longitudinal joints.



REMODELING OLD HOMES

Application of Stained Shakes to old, cracked, leaky and unsightly walls is a simple matter. Over stucco, nailing strips are attached with nails long enough to penetrate the old surface and the underlying sheathing. Over all old flat wood surfaces, stained shakes are double-coursed directly to the surface, adding insulation, long life, and completely new architectural appearance to outmoded sidewalls.

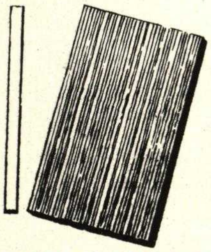
Stained Shingles, Handsplit and Resawn Shakes are all excellent for re-roofing right over old materials. The "bridging" effect of shingle application actually adds materially to the strength and rigidity of the roof, where most materials add only weight, without increasing structural strength. The preservative oils in **Stained Shingles** add extra years of life.



ROOF AND SIDEWALL *Specifications*

HANDSPLIT SHAKES

Ideally suited to luxury homes, resorts and summer or country cottages, handsplit shakes are truly America's "natural" roofing material. Used since colonial days, these shakes reflect America's earliest architectural tradition, and will out-last, for their cost, any other roof material available.

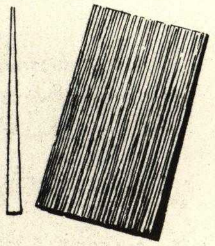


TAPERSPLIT SHAKES

(Both sides with natural split surface)

These are produced with hand tools from clear Cedar blocks. After the logs are sawed to the proper length, expert shake makers split these blocks so that they taper from butt to tip, similar to a sawn shingle. They are made 24″ or 25″ long and ½″ thick at the butt, tapered to a thin tip so they can be applied on a roof in the same manner as shingles.

These Tapersplit Shakes can be produced only in Vertical Grain. The edges are trimmed by hand to remove sap, rot, or other defects, and to give a reasonably true edge, but not to make them at right angles to the butt.

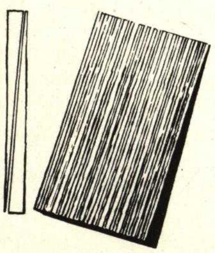


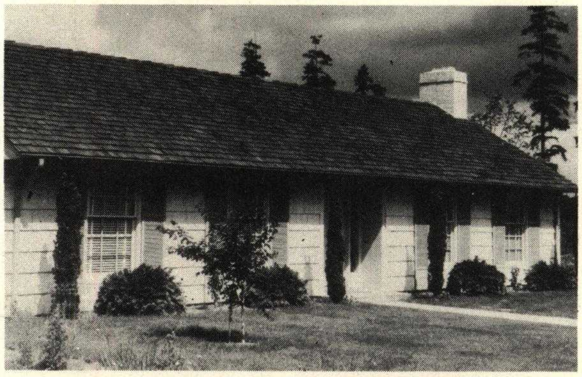
RESAWN SHAKES

(Handsplit face, sawn back)

Cedar logs are first cut into blocks the proper length. Then these blocks are split by hand into boards about 1½″ thick. These boards are then made into shakes by sawing them diagonally, which produces a thin tip, a flat sawed back, and a rough face. Resawn shakes present a rougher surface than Tapersplit shakes and have a greater variance in thickness.

They are made in one length, and packed in two sizes according to the thickness—⅜″ to ¾″ x 25″ or 24″ and ⅝″ to 5/4″ by 25″ or 24″.





VALLEY FLASHINGS

(Use 46 to 56 for Open Valleys and 57 for Closed Valleys.)

(46) Longitudinal joints in valleys will not be permitted.

(47) Transverse joints shall be made shingle fashion and lap not less than

(Use 48 for roofs of ½ pitch or steeper.)

(48) 6 inches

(Use 49 on roofs of ½ to ¼ pitch.)

(49) 8 inches

(Use 50 on roofs of less than ¼ pitch.)

(50) 10 inches

(Use 51 for tin.)

(51) and shall be soldered.

(Use 52 for lead.)

(52) Valley sheets shall not be longer than 8 ft. Joints between lead sheets must be loose-locked, the joint being filled with an approved non-hardening compound. Lead valley sheets shall be secured with hard lead cleats folded into the loose-locked joints; the other end of the cleat being nailed free of the lead sheet.

(53) Valleys sheets shall extend outward on each side from the center line of all valleys for a distance of at least (*Specify distance.*)

(Use 54 for ½ pitch and steeper and 55 for less than ½ pitch.)

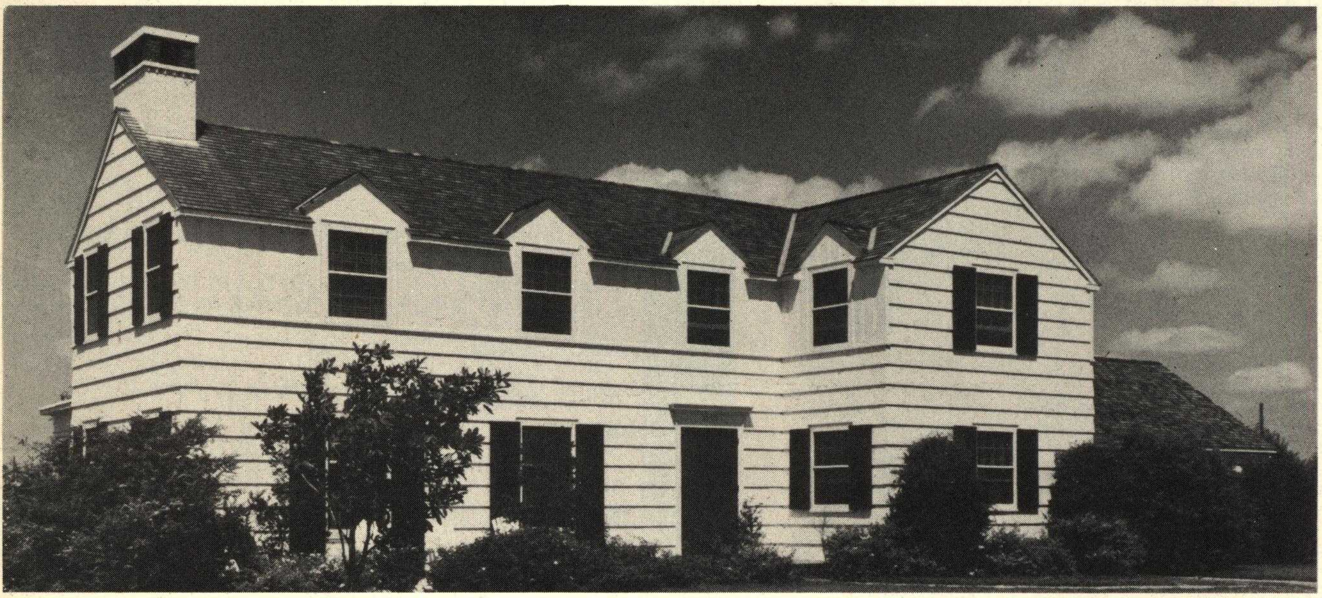
(54) 7 inches.

(55) 10 inches.

(56) At the ridge line, the open portion of every valley shall be at least 2″ wide, increasing in width at the rate of at least ½″ per 8 ft. in length as it descends. Valleys uniform in width, and not less than 4″ wide shall be used where their length does not exceed 8 ft.

(57) Flashings for closed valleys shall be separate pieces so that there will be a flashing between each course of shingles. Each piece shall be set so as to lap at least 3″ and to be entirely concealed by the shingles; shall be fastened with nails at the top edge only; shall be sufficient length to extend 2″ above the top of each shingle and shall lap the flashing sheet below 3″.

Stained CEDAR SHAKES & SHINGLES FOR ROOFS & SIDEWALLS



ASSOCIATION MEMBERS

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M. R. Smith Lumber & Shingle Co.
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Preservative Paint Company
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North Tonawanda, New York

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